Dialight

DuroSite® LED High Bay - CE

for Indoor and Outdoor Industrial Applications

Patent Pending

DuroSite® LED High Bay

Features & Benefits

- 10 year full performance warranty available (17,500 - 25,000 lumen models only)
- 5 year full performance warranty standard
- L70 rated for >100,000 hours @ 25°C ambient
- Up to 102lm/W
- Significant energy savings
- Instant on/off
- Maintenance free
- Mercury free
- No UV or IR
- Produces minimal heat compared to traditional fixtures
- Reflector based optics for precise light control
- Resistant to shock and vibration
- Temperature compensation technology for long life
- Copper free aluminium
- Typical pay back < 2 years

About Dialight

Dialight (LSE: DIA.L) is leading the energy efficient LED lighting revolution around the world for industrial and hazardous areas as well as transportation and infrastructure applications. For 40 years it has been committed to the development of LED lighting solutions that enable organizations to vastly reduce energy use and maintenance needs, improve safety, ease disposal and reduce CO_2 emissions.

History at a Glance

1938 → Dialight founded in Brooklyn, NY
1971 → LED Circuit Board Indicator
1994 → LED Transit Vehicle Signals
1995 → LED Traffic Signals
2000 → FAA certified LED Obstruction Lights
2007 → LED Lighting for Hazardous Locations
2009 → LED High Bay Fixtures
2012 → Full performance 10-year warranty
2013 → Controls for LED Lighting
2014 → 125 Lumens per Watt

DuroSite High Bay Mounting Chart

Lumens	Wattage	lm/W	Mounting Heights
25,000	270	90	24m ↕ 5m
17,500	172	102	
14,500	153	95	
12,000	146	82	
10,000	137	73	

Typical Applications

- Oil, Gas & Petrochemical
- Power Generation
- Mining
- Chemical
- Pharmaceutical
- Water & Sewage
- Food & Beverage
- Manufacturing
- Warehousing
- Cold Storage

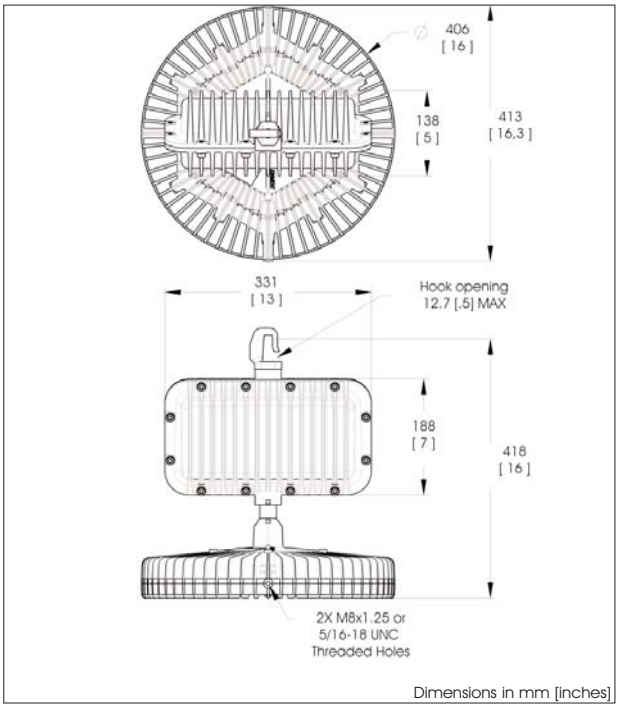
View the full case studies at:

G.S. Dunn Limited - www.dialight.com/news/details/gsdunn_case_study
Rockline Industries - www.dialight.com/news/details/rockline_case_study
MedSafe - www.dialight.com/news/details/medsafe_case_study
Kuehne + Nagel - www.dialight.com/news/details/kuehne_nagel_case_study

Dialight also offers their products for Hazardous Locations

Complete your own return on investment calculation at: **www.dialight.com/tcoCalculator/Durosite_HighBay**

DuroSite® LED High Bay - CE
25,000 Lumen



Dimensions in mm [inches]

Certifications & Ratings:

- CE
  - EN 55015:2006
  - EN 61547:2009
  - EN 60598:2008
  - EN 62471:2008
- IK05 to EN50102
- IP 66 to EN60529

Features & Benefits

- 10 year full performance warranty
- L70 rated for >100,000 hours @ 25°C ambient
- Instant on/off operation
- Universal power supply
- Superior colour rendition index compared to HPS, LPS, MV
- Mercury free
- Resistant to shock and vibration
- Temperature compensation technology for longer life
- Factory sealed

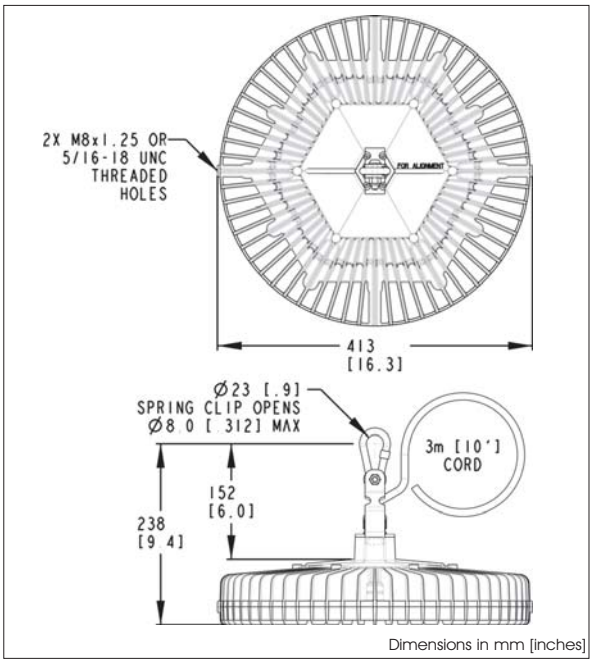
Application:
The first of its kind, the Dialight DuroSite® LED High Bay luminaire was designed specifically to replace conventional lighting in a wide variety of industrial applications, both indoor and outdoor. Now providing 25,000 lumens, the High Bay is a great fit for applications such as high bay lighting, warehouses, factories, cold stores, restricted access areas, service areas and other applications.

All of Dialight's long life LED luminaires are designed to meet the most demanding specification criteria while offering maximum energy savings, reduced maintenance costs, and a superior quality of light. Hazardous area models are also available.

Mechanical Information	
Fixture Weight:	13.6 kg (30 lbs)
Shipping Weight:	15.88 kg (35 lbs)
Mounting:	Hook (included) For other options consults factory
Cabling:	3m (10') PVC Power Cord
Electrical specifications	
Operating Voltage:	100-277V AC
Total System Power Consumption:	See table
Operating Temp:	-40°C to +65°C (-40°F to +149°F)
Harmonics:	EN 61000-3-2
Noise Requirements/ EMC:	EN 61000-3-2: 2006 EN 61547: 2009
Transient Protection:	10kV/2 ohm, 1.2/50us, 8/20us combination wave, as per IEEE C62.41, line-line and line-ground
THD:	<20%
Power Factor:	> 0.9
Construction	
Housing:	Copper free aluminium
Finish:	Light grey polyester powder coated
Lens:	Tempered Glass
Photometric Information	
CRI:	70+ or 80+ options
CCT:	5,000K (cool white) 4,000K (neutral white)

All values typical unless otherwise stated
All lumen values are typical +/- 10%

DuroSite® LED High Bay - CE
10,000 to 17,000 lumen



Dimensions in mm [inches]

Certifications & Ratings:

- CE
  - EN 55015:2006
  - EN 61547:2009
  - EN 60598:2008
- EN 62471:2008
- ABS Design Assessed: # 12-HS950618-PDA
- Gost R
- IEC60068 salt spray testing- severity 1
- IK10 to EN50102 (polycarbonate lens)
- IK06 to EN50102 (Acrylic lens)
- IK05 to EN50102 (Glass lens)
- IP66 to EN60529

Application:

Dialight's DuroSite® LED High Bay luminaire was designed specifically to replace conventional lighting in a wide variety of industrial applications, both indoor and outdoor. Its low profile, light weight design and versatile mounting options make it ideal for many applications such as high bay lighting, warehouses, factories, cold stores, restricted access areas, service areas and other applications with mounting heights greater than 4 meters.

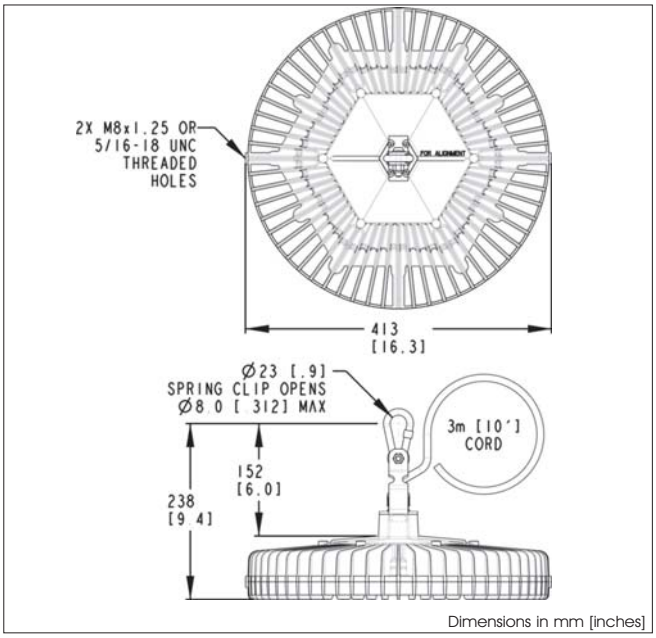
All of Dialight's long life LED luminaires are designed to meet the most demanding specification criteria while offering maximum energy savings, reduced maintenance costs, and a superior quality of light. Hazardous area models are also available.

Mechanical Information	
Fixture Weight:	8 kg (18 lbs)
Shipping Weight:	11kg (24 lbs)
Mounting:	Hook or Swivel bracket (supplied separately)
Cabling:	3m (10') PVC Power Cord (Junction box model also available)
Electrical specifications	
Operating Voltage:	100-277V AC
Total System Power Consumption:	See table
Operating Temp:	-40°C to +65°C (-40°F to +149°F)
Harmonics:	EN 61000-3-2
Noise Requirements/ EMC:	EN 61000-3-2: 2006 EN 61547: 2009
Transient Protection:	6kV/2 ohm, 1.2/50us, 8/20us combination wave, as per IEEE C62.41, line-line and line-ground
THD:	<20%
Power Factor:	> 0.9
Construction	
Housing:	Copper free aluminium
Finish:	Light grey powder coated
Lens:	Acrylic (PMMA) Polycarbonate (PC) Tempered Glass
Photometric Information	
CRI:	70+ and 80+ options
CCT:	5,650K (cool white) 4,300K (neutral white)

All values typical unless otherwise stated
All lumen values are typical +/- 10%

DuroSite® LED High Bay Options and Accessories

Variable Dimming: 0-10V DC



Dimensions in mm [inches]

Dialight offers a series of High Bay products with ACTIVE Dimming. Dimming permits the user to select a specific light output and power consumption to meet their requirements. The reduction in light output and power consumption are approximately proportional. Reducing the light output by 50% will reduce the power consumption by 50%. LEDs are particularly well suited for dimming as compared to other industrial light sources.

STEP Dimming Mode

The variable dimming High Bays may also be configured to operate in a single STEP Dimming configuration. When the dimming control conductors are connected together, the light output will be reduced to approximately 20% of the maximum light output. The total fixture power consumption will also be reduced to approximately 20% (30 W). Connecting the leads together can be accomplished with a common wall switch.

Mechanical, Electrical and Photometric information is the same on page 1 except where detail is provided

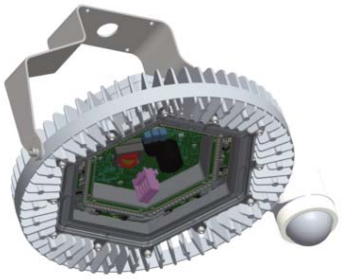
Variable Dimming Cable:	Dimming connections included in factory installed 5 core cable. Multiple high bays can be connected to the same dimmer, consult dimming instructions and manufacturer
Variable Dimming Control:	0-10 V DC active
Typical Dimming Range:	10V DC = 100% light output 0V DC = 20% light output and power consumption

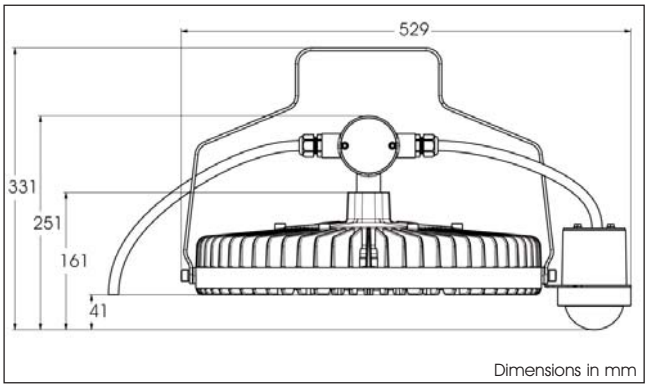
Features and Benefits

- 3 meter, 5 core PVC cable pre-installed
- Multiple High Bays can be connected to the same dimmer
- May also be configured to operate in a single STEP Dimming configuration, please consult technical department

DuroSite® LED High Bay

Automatic daylight dimming and occupancy sensor





Dimensions in mm

Features and Benefits

- No additional electrical connections required
- Once installed, the lights can be programmed and set up from the ground using the remote control (sold separately, for full list of part codes, see table 'Ordering Information)
- Allows user to maximise their energy savings by having the lights on only when needed
- Senses heat movement across the sensing zones - consult factory for more details
- Consult factory for recommended installation guidelines and applications

Mechanical, Electrical and Photometric information is the same as on page 1 except where detail is provided

Weight:	8.4kg (18.5 lbs)
Sensor Mounting:	Cable input 3 metre 3 core cable fitted
Sensor Timing Non dimming model:	1,5,10,15 and 30 mins.
Dimming model:	On, Off, 1, 10, 30 and 60 mins.
Sensor operation:	Dependant on application and height, please consult technical department
Operating voltage:	230 / 240V AC only
Operating Temperature:	-30°C + 50°C (-22°F + 122°F)
IP Rating:	IP 54 to EN60529

DuroSite® LED High Bay
Ordering Information

Part Number	Initial Fixture Lumens	Wattage	Lumens Per Watt	Lens		Optical Pattern		Variable Dimming
				Clear	Diffused	Circular	Aisle	
10 Year Warranty								
HLGC4KN-EUH-10YR	25,000	270	93	Tempered Glass		•		
HLGC4KN-EUDH-10YR	25,000	270	93	Tempered Glass		•		•
HBGCMP-EUH-10YR	17,500	172	102	Tempered Glass		•		
HBGCMP-EUDH-10YR	17,500	172	102	Tempered Glass		•		•
HBLCMP-EUH-10YR	15,000	172	87		Polycarbonate	•		

Part Number	Initial Fixture Lumens	Wattage	Lumens Per Watt	Lens		Optical Pattern	
				Clear	Diffused	Circular	Aisle
5 Year Warranty							
HBGCMP-EUH	17,500	172	102	Tempered Glass		•	
HBGC4P-EUH	14,500	161	90	Tempered Glass		•	
HBEC4P-EUH	13,500	161	84	Tempered Glass			•
HBEC4N-EUH	11,750	146	80	Tempered Glass			•
HB1C4N-EUH	11,500	146	79	Acrylic		•	
HB5C4N-EUH	10,750	146	74		Acrylic	•	
HB0C4M-EUH	10,750	146	74	Polycarbonate		•	
HB2C4M-EUH	10,000	146	68		Polycarbonate	•	
HB7C4M-EUH	10,000	146	68		Polycarbonate		•
Occupancy Sensor							
HB1C4N-EUTOS	11,500	146	79	Acrylic		•	
HB5C4N-EUTOS	10,750	146	74		Acrylic	•	
HB0C4M-EUTOS	10,750	146	73	Polycarbonate		•	
HB2C4M-EUTOS	10,000	146	68		Polycarbonate	•	
HB7C4M-EUTOS	10,000	146	68		Polycarbonate		•
Variable Dimming							
HBGCMP-EUDH	17,500	172	102	Tempered Glass		•	
HBGC4P-EUDH	14,500	161	90	Tempered Glass		•	
HBEC4P-EUDH	13,500	161	83	Tempered Glass			•
HBEC4N-EUDH	11,750	146	80	Tempered Glass		•	
HB1C4N-EUDH	11,500	146	79	Acrylic		•	
HB5C4N-EUDH	10,750	146	74		Acrylic	•	
HB0C4M-EUDH	10,750	146	73	Polycarbonate		•	
HB2C4M-EUDH	10,000	146	68		Polycarbonate	•	
HB7C4M-EUDH	10,000	146	68		Polycarbonate		•
Occupancy Sensor with Dimming							
HB1C4N-EUTOSD	11,500	146	79	Acrylic		•	
HB5C4N-EUTOSD	10,750	146	74		Acrylic	•	
HB0C4M-EUTOSD	10,750	146	73	Polycarbonate		•	
HB2C4M-EUTOSD	10,000	146	68		Polycarbonate	•	
HB7C4M-EUTOSD	10,000	146	68		Polycarbonate		•

Notes for all models:

[1] Part numbers listed in the above table are cool white. For neutral white models replace the 4th character with an **N** Ex: HB1**C**4N-EUH becomes HB1**N**4N-EUH

[2] Part numbers listed in the above table are 70 CRI cool white. For 80 CRI cool white models replace the 4th character with an **B** Ex: HB1C4N-EUH becomes HB1**B**4N-EUH. For 80 CRI neutral white models replace the 4th character with an **M** Ex: HB1**C**4N-EUH become HB1**M**4N-EUH. Choosing 80 CRI will decrease the lumen output by 20%

Notes for standard models only:

[3] Numbers listed in the tables above come with a flat lens. These can be ordered with a polycarbonate dome lens; replace 3rd character with an **L** Ex: HB**1**C4N-EUH becomes HB**L**C4N-EUH

[4] For junction box models; add a **J** after the 2nd character Ex: HB1C4N-EUH becomes HB**J**1C4N-EUH (not applicable for 25,000 High Bay)

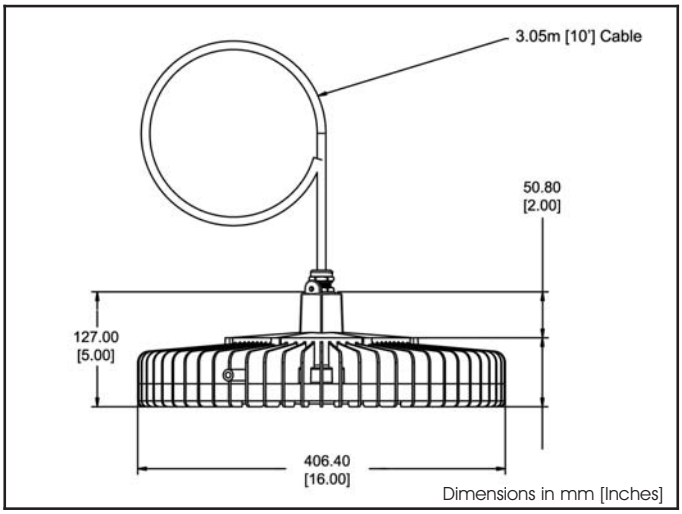
DuroSite® LED High Bay

Accessories

	Part Number	Description	Kit Includes	Compatibility	
				8,500 -17,500lm	25,000lm
	HBXW3	Swivel Bracket Grey powder coated aluminium (Interior or exterior use)	Swivel Bracket Bracket to fixture hardware	•	
	HLXW3	Swivel Bracket	Swivel Bracket Bracket to Fixture Hardware		•
	HBXW3-SS	Swivel Bracket Stainless Steel (Interior or exterior use)	Swivel Bracket Bracket to fixture hardware	•	
	HBXGS-10	Glare Shield - sets of 10 Grey (RAL7001) powder coated spun aluminium (Interior use only, for use with flat lens options)	Aluminium shield and securing hardware	•	•
	HBXSBK	Sand blast kit (flat lens)	Bracket and flat lens	•	•
	HBXSBL	Sacrificial flat Lens	Replacement flat lens	•	•
	HBXSBDK	Sand blast kit (dome lens)	Bracket and dome lens	•	•
	HBXSBDL	Sacrificial dome Lens	Replacement dome lens	•	•

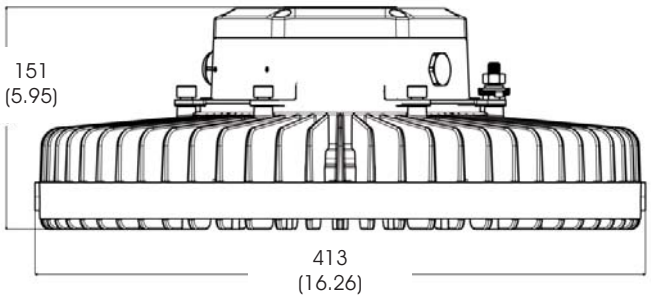
Mechanical Drawings

HBXXXX-EUH (Standard models)



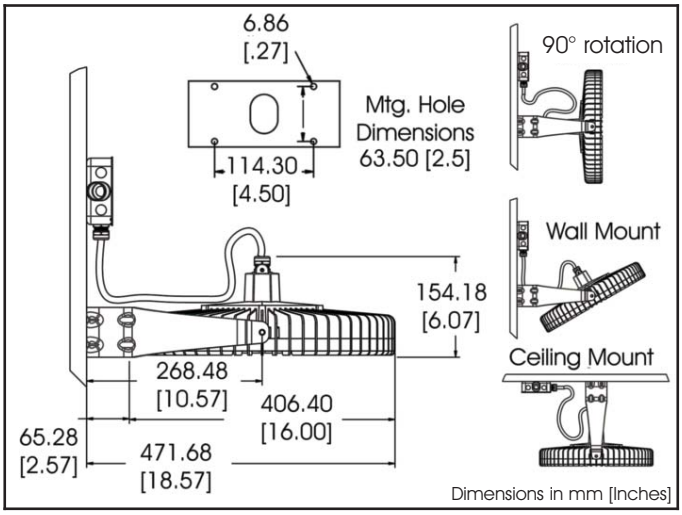
Dimensions in mm [Inches]

HBJXXXX-EUH (Junction box types)



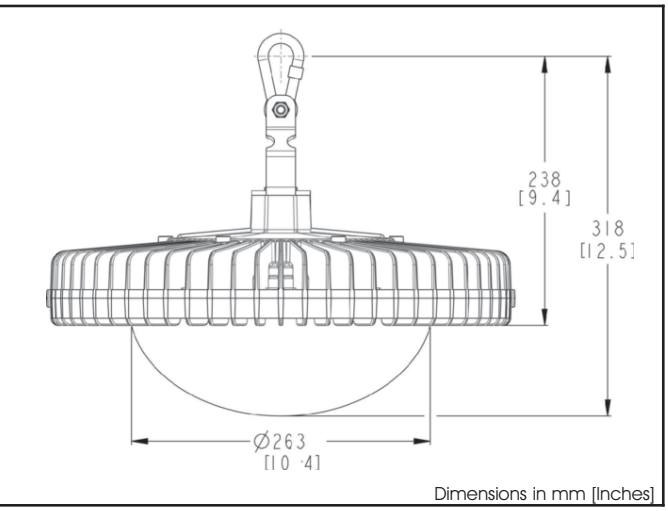
Dimensions in mm [Inches]

HBXW3



Dimensions in mm [Inches]

HBLXXX-EUH (Dome lens type)



Dimensions in mm [Inches]

DuroSite® LED High Bay
Mounting Height

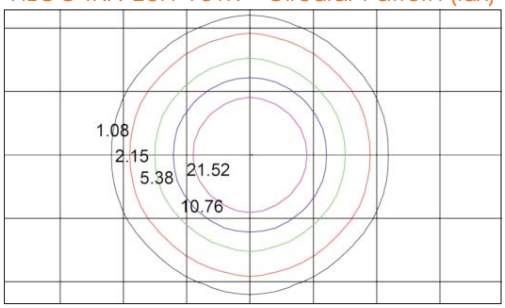
Lumens	Wattage	lm/W	Mounting Heights
25,000	270	93	24m ↕ 5m
17,500	172	102	
14,500	161	90	
10,000	146	68	

Iso-Illuminance

Candela Plots

25,000 lumen model

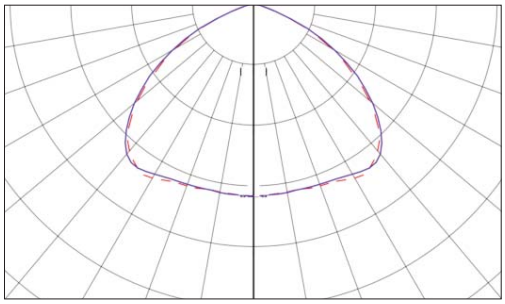
HLGC4KN-EUH-10YR - Circular Pattern (lux)



Examples shown is mounted at 12m
Distance of grid is equal to Mounting Height
Values stated are in lux

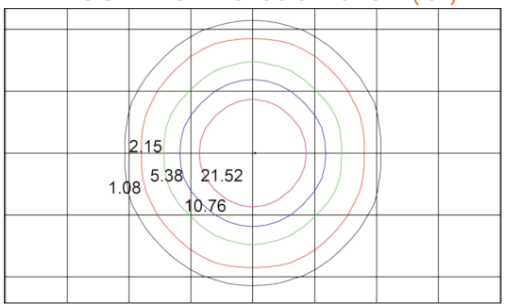
Mounting Height	Multiplier
3m	16.000
5m	7.111
6m	4.000
8m	2.560
9m	1.778
11m	1.306
12m	1.000
14m	0.790
15m	0.640

HLGC4KN-EUH-10YR - Circular Pattern



17,500 lumen model

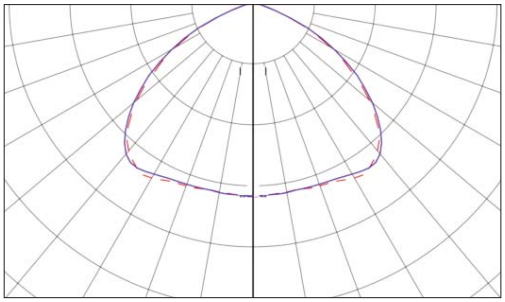
HBGCMP-EUH - Circular Pattern (lux)



Examples shown is mounted at 11m
Distance of grid is equal to Mounting Height
Values stated are in lux

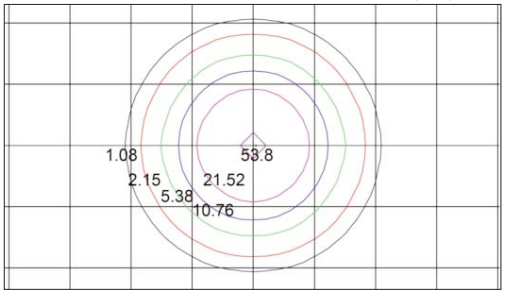
Mounting Height	Multiplier
3m	12.250
5m	5.44
6m	3.063
8m	1.960
9m	1.361
11m	1.000
12m	0.766
14m	0.605
15m	0.490

HBGCMP-EUH - Circular Pattern



14,500 lumen model

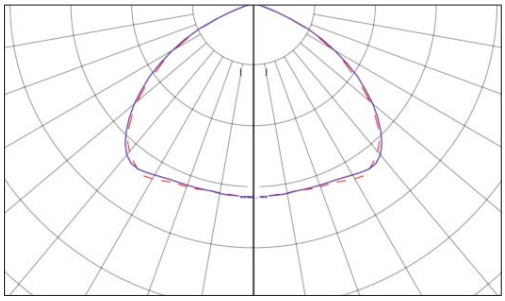
HBGC4P-EUH - Circular pattern (lux)



Examples shown is mounted at 9m
Distance of grid is equal to Mounting Height
Values stated are in lux

Mounting Height	Multiplier
3m	9.000
5m	4.000
6m	2.250
8m	1.440
9m	1.000
11m	0.735
12m	0.563
14m	0.444
15m	0.360

HBGC4P-EUH - Circular Pattern



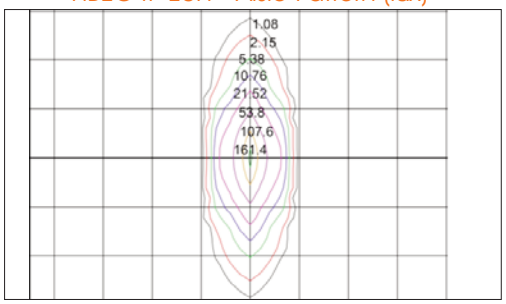
DuroSite® LED High Bay
Measurement Data

Iso-Illuminance

Candela Plots

13,500 lumen model

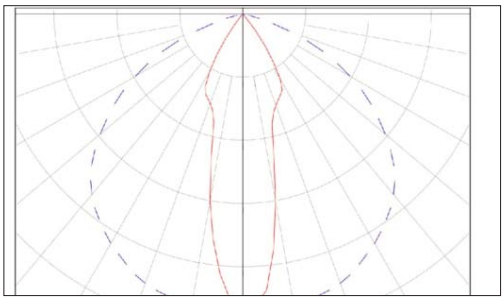
HBEC4P-EUH - Aisle Pattern (lux)



Examples shown is mounted at 9m
Distance of grid is equal to Mounting Height
Values stated are in lux

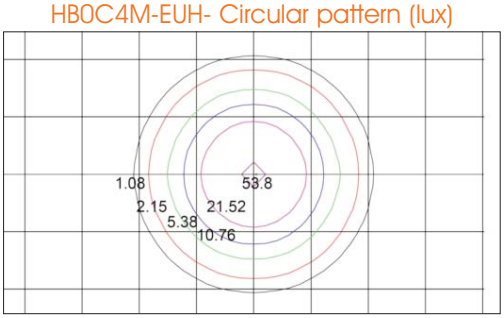
Mounting Height	Multiplier
3m	9.000
5m	4.000
6m	2.250
8m	1.440
9m	1.000
11m	0.735
12m	0.563
14m	0.444
15m	0.360

HBEC4P-EUH - Aisle Pattern



10,750 lumen model

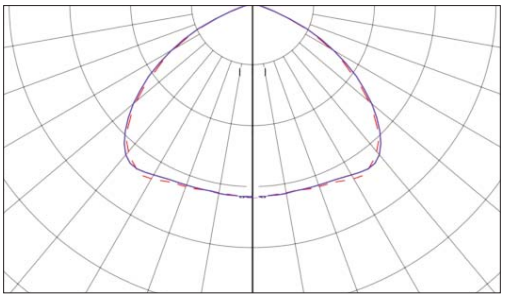
HB0C4M-EUH- Circular pattern (lux)



Examples shown is mounted at 8m
Distance of grid is equal to Mounting Height
Values stated are in lux

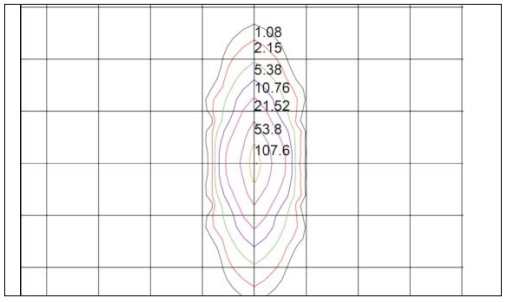
Mounting Height	Multiplier
3m	6.250
5m	2.778
6m	1.563
8m	1.000
9m	0.694
11m	0.510
12m	0.391
14m	0.309
15m	0.250

HB0C4M-EUH - Circular Pattern



10,000 lumen model

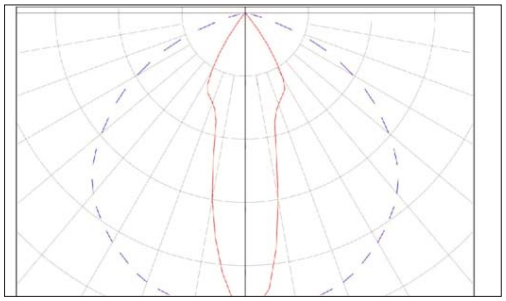
HB7C4M-EUH - Aisle Pattern (lux)



Examples shown is mounted at 8m
Distance of grid is equal to Mounting Height
Values stated are in lux

Mounting Height	Multiplier
3m	6.250
5m	2.778
6m	1.563
8m	1.000
9m	0.694
11m	0.510
12m	0.391
14m	0.309
15m	0.250

HB7C4M-EUH - Aisle Pattern



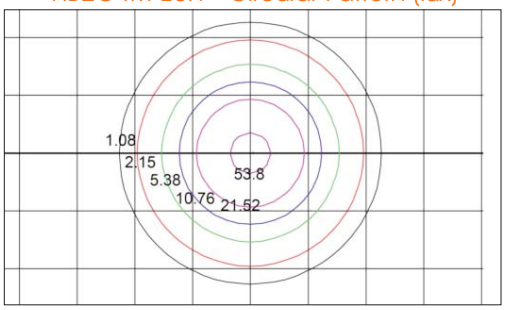
DuroSite® LED High Bay
Measurement Data

Iso-Illuminance

Candela Plots

10,000 lumen model

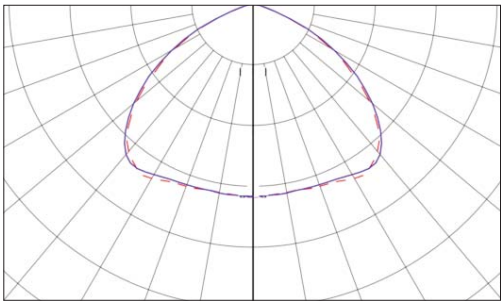
HB2C4M-EUH - Circular Pattern (lux)



Examples shown is mounted at 6m
Distance of grid is equal to Mounting Height
Values stated are in lux

Mounting Height	Multiplier
3m	4.000
5m	1.778
6m	1.000
8m	0.640
9m	0.444
11m	0.327
12m	0.250
14m	0.198
15m	0.160

HB2C4M-EUH - Circular Pattern



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